APOS A8
User Guide
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SEAMLESS PAYMENT
1. Introduction

We hope that you will be fully satisfied with your new APOS A8 terminal.

Read this guide to understand and make the best use of your terminal. It presents you the necessary information about use, installation, maintenance, safety and security recommendations.

**WARRANTY / SECURITY**

Use only the power supply included with the product to ensure best performance and safety. Maintenance should only be provided by Ingenico authorized technician. Failure to comply with these instructions will void the manufacturer’s responsibility.

This symbol indicates an important Warning.

This symbol indicates a piece of advice.
2_Presentation

2_1 Content of the box

- APOS A8 terminal unit equipped with a paper roll
- Power adapter
- A battery pack
- This user guide

**WARNING**
The power supply unit provided with your equipment is specially designed for Ingenico terminals. Do not use any other power supply. The use of a power supply with apparently similar voltage/current characteristics may damage your terminal.

**ADVICE**
Keep the packaging. It must be re-used whenever the terminal is shipped.
Overview of the APOS A8

1. Contactless landing zone
2. LCD and touch screen
3. Smart card reader
4. Magnetic card reader
5. Microphone
6. Easy Loading Printer
7. Power Key
8. Volume Keys
9. Front scanner
10. LEDs for Contactless Card
11. Charging LED
12. Battery cover
13. Headphone jack
14. Micro USB connector

SEAMLESS PAYMENT
15. SIM card slot
16. MicroSD slot
17. Extended interface
18. Buzzer
19. Speaker

20. SAM cards slots
21. Battery socket
22. Battery compartment
23. Flash
24. Rear camera

<table>
<thead>
<tr>
<th>Weight</th>
<th>445g (including battery)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension (L x W x H)</td>
<td>183mm x 84mm x 64mm</td>
</tr>
<tr>
<td>Electrical mains network</td>
<td>100-240VAC/50-60Hz Class II</td>
</tr>
</tbody>
</table>
2.3 Keypad Functions

The terminal has three physical keys at the upper right at the top of the screen, a power button and two volume keys, and three touch keys at the bottom, Menu, Home and Back keys.

2.4 Touch Panel

The APOS A8 device is equipped with touch panel that allows you capture functions and menus by your finger or use a stylus.
3_Use of the terminal

ADVICE
Before using the terminal, always check if the roll of paper is present.

3_1 Power on/Power off the terminal

To power on: Make sure the terminal battery is correctly installed and Press <Power> button for about 1s until the display is turned up.

To power off: Press <Power> button for more than 2s until the display show the following figure, then press <Power off>.

If the battery is empty, the terminal automatically shuts off.

Abnormal power off :
When the device works abnormally, for example, it is crashed and no actions menu popped out while pressing the power button, please long-press the power button for 6s, the device will be automatically powered off.

Screen saver mode :
Short-press the power button for about 0.5s, the terminal display will be turned on or off.
3_2 Reading cards

**Magnetic stripe card**

The card can be read bi-directionally, with the stripe facing the terminal. Use a regular movement in order to ensure a reliable card reading.

**Smart card**

Insert the card horizontally with the metal chip facing upward and leave in position throughout the transaction.
Contactless card

Bring the card firmly up to the active zone.

Keep the card close to the reader during the transaction.

On the front, LEDs are displayed to indicate transaction processing.

3_3 Usage of Front Camera

- The brightness of the mobile phone must be set to the brightest or not less than 2/3 of the maximum brightness.

- The screen of the mobile phone must face the front scanning head above the terminal screen and keep it stationary.

- The screen of the mobile phone must be parallel to the front scanning head.

- The vertical distance between the screen of the mobile phone and the front scanning head should be between 10~30 cm; 20 cm would be the best.

- The terminal will beep with a successful scanning.
3_4 Headphone jack and Micro USB

There are a 3.5mm headphone jack and a Micro USB A connector on the left side of the terminal.

The connector manages Host and Slave connections.

4_Installation

4_1 Recommendations

Operating conditions

<table>
<thead>
<tr>
<th><strong>Ambient temperature</strong></th>
<th>from -10°C to +50°C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max relative humidity</strong></td>
<td>from 10% to 90°C, Non-condensing</td>
</tr>
</tbody>
</table>

(*) Excluding battery charging

Battery charging conditions

| **Ambient temperature** | from 0°C to +50°C |

Storage conditions

<table>
<thead>
<tr>
<th><strong>Ambient temperature</strong></th>
<th>from -20°C to +70°C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max relative humidity</strong></td>
<td>from 5% to 90°C, Non-condensing</td>
</tr>
</tbody>
</table>
4_2 Installing modules

4_2_1 SAM1 / SAM2 / SIM

WARNING
Switch off the terminal before opening the trapdoor.

The SAM/SIM connectors are located inside the terminal, in a closed compartment.

> Turn the terminal and remove the trapdoor.

> SAM1, SAM2 and SIM are identified by the engraved marks on the lower housing.

> When introducing a SAM/SIM in its slot, be sure to put the cut corner as indicated on the picture.

> Close the trapdoor
**ADVICE**

APOS A8 is equipped with a dual SAM slot.

When using two SAM cards, it is recommended to insert the bottom one first, then the top one.

When using only one SAM card, it is recommended to insert SAM1 slot (bottom).

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**ADVICE**

SIM and SAM cards share the same form factor, please do be careful to the SIM card socket position.

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### 4_2_2 MicroSD memory card

**WARNING**

Switch off the terminal before opening the trapdoor.

MicroSD connector is located inside the terminal, in a closed compartment.

- Turn the terminal and remove the trapdoor.

- MicroSD are identified by the engraved marks on the lower housing.

- Slide the cover to the right and pull to open it. Insert MicroSD card, push the cover to close and slide it to the left to lock it. Be sure to put the MicroSD contacts downside and the cut corner as indicated on the figure.

- Close the trapdoor.

The terminal supports MicroSD up to 32GB.
4_3 Paper roll

4_3_1 Main characteristics of INGENICO paper roll

<table>
<thead>
<tr>
<th>R40 paper roll characteristics</th>
<th>Precisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Width</td>
<td>58 mm</td>
</tr>
<tr>
<td>Diameter</td>
<td>40 mm</td>
</tr>
<tr>
<td>Length</td>
<td>About 18 meters</td>
</tr>
</tbody>
</table>

The thermal paper can be deteriorated by poor storage conditions, so we recommend you to avoid:

- Storage in hot wet places (near air-conditioner, humidity higher than 85%).
- Exposure to sunlight or ultraviolet for long periods.
- Contact with organic solvents (solvent type adhesive).
- Direct contact with materials containing plasticizers (PVC transparent folders or envelopes).
- Direct contact with «diazo» papers.
- Direct contact with water
- Rubbing or pressing the paper too strongly

**WARNING**

For best product performance, only use heat sensitized paper approved by Ingenico.
4_3_2 Installing paper roll

Open the paper cover by lifting the catch located at the top of APOS A8 and pull the cover to the rear of the terminal.

Insert the paper roll in the compartment following the directions shown on the below picture.

Pull the paper up to the top of terminal, maintain the paper and close the cover.

Press simultaneously on both upper corners of the paper flap until it clips into position.

ADVICE
If you insert a new R40 paper roll, tear off the first length (one complete turn to avoid printing on adhesive footprint).

WARNING
Switch off the terminal prior to installing a paper roll. Use only paper approved by Ingenico.

The use of no-approved paper is likely to damage the printer of your terminal.
4_4 Battery

4_4.1 Charging the battery

When does the battery need to be charged?

- When used daily, the terminal charges its battery each time the power adapter is connected. Charging starts automatically.

How can the battery be charged?

Using the power adaptor

- Connect the power adapter to the terminal micro USB type A connector located on the left side of the terminal.
- Connect the power adapter to the power supply mains network.
- Check if the Red LED at the top of front is lighted (it means battery charging).

4_4.2 Installing the battery

WARNING
Check that the terminal is not connected to the main electric network.

- Turn your terminal and unclip the battery trapdoor by pushing the clips as shown with the arrow on the picture.
- Disengage the trapdoor.
- Take the battery pack included in the box
- Locate the battery pack connector beside the battery compartment
- Plug the battery pack connector according to the connector locating system.
- Place the battery pack in its compartment
- Close the battery trapdoor.
5_Recommendation

5_1 Safety

Powering down the APOS A8
Disconnect the APOS A8 power supply block adapter from the electrical mains network.

Lithium cell
The APOS A8 is fitted with an internal lithium cell which should only be accessed by a qualified technician.

Battery
- APOS A8 is fitted with battery specially designed for this terminal.
- Only use the appropriate chargers and batteries listed in the Ingenico’s catalogue.
- Do not short-circuit the battery.
- Do not attempt to open the battery container.
- Used batteries must be disposed of at the appropriated sites.

The lifespan of battery depends on:
- Features used
- Number of charge and discharge cycles
- Use temperature
There is a risk of explosion if the battery is incorrectly replaced or is placed in a fire.

**WARNING**

Electrical power supply network

The electrical outlet must meet the following criteria:

- Must be installed **near the equipment and easily accessible**.
- Do not short-circuit the battery.
- Do not attempt to open the battery container.

The power supply label contains eleven symbols:

- CCC (China Compulsory Certificate) Mark
- The Regulatory Compliance Mark (RCM)
- International Efficiency Marking Protocol (Energy Star Level 6)
- In door use only
- “Conformité Européenne” or CE Mark
- Double insulation symbol
- 5 Years China RoHS symbol
10 Years China RoHS symbol

BSMI (Taiwan)

PSE Mark (Japan)

Recycle in accordance with the waste electronic & electrical equipment directive

Underwriters Laboratories Inc (US Compliance)

Made from recyclable material

Low density version of Polyethylene (LDPE)

Chlorinated Polyethylene (CPE)

Risk of explosion if the battery is incorrectly replaced or is placed in a fire

Dispose of batteries at a hazardous waste collection site or recycling facility

Dispose of batteries at a hazardous waste collection site or recycling facility
**SAM1/SAM2/SIM Readers compartment**

The trapdoor for battery, SAM1/SAM2/SIM, readers located underneath the terminal, must be in place during the normal operation of the terminal. See sections “Installing modules” and “installing the battery”.

**On airplanes**

Your terminal must be switched off by removing the battery pack. Remove the battery from the terminal when on an airplane.

Non-compliance with these safety rules may result in legal action and/or a ban on later access to cellular network services.

**Explosion areas**

Some regulations restrict the use of radio equipment in chemical plants, fuel depots and any site where blasting is carried out. You are urged to comply with these regulations. The terminal shall be protected by a specially fitted and certified cover enabling use in proximity to a fuel pump.

**Thunderstorm weather**

According to some relevant reports, the mobile phone electromagnetic wave is good conductor of lightning. It is much easier to suffer lightning strike when the damp atmosphere from a magnetic conductivity, especially in open areas. Do not use wireless terminals under thunderstorm weather.

**Electronic health appliances**

Your terminal is a radio transmitter which may interfere with health appliances, such as hearing aids, pacemaker, hospital equipment, etc.

Your doctor or the equipment manufacturer will be able to provide you with appropriate advice.
5_2 Security of your terminal

Your device fulfils current applicable PCI PTS security requirements. Upon receipt of your terminal you should check for signs of tampering of the equipment. It is strongly advised that these checks are performed regularly after receipt. You should check, for example: that the keypad is firmly in place; that there is no evidence of unusual wires that have been connected to any ports on your terminal or associated equipment, the chip card reader, or any other part of your terminal. Such checks would provide warning of any unauthorized modifications to your terminal, and other suspicious behaviour of individuals that have access to your terminal. Your terminal detects any “tampered state”. In this state the terminal will repeatedly flash the message “Warning Detected” and further use of the terminal will not be possible. If you observe the “Warning Detected” message, you should contact the terminal helpdesk immediately.

You are strongly advised to ensure that privileged access to your terminal is only granted to staff that have been independently verified as being trustworthy. The terminal must never be put in or left at a location where it could be stolen or replaced by another device.

5_3 Fixed installation

If the device is to be used in a situation where it is not possible for the cardholder to pick up and shield their PIN entry themselves, the device may be used, but it must be installed in the following manner:

- The device must be angled at 45 or more, so that oversight of the PIN entry from the rear of the device is not possible.
- The device must either be fitted in a swivel stand – so that the customer can position the device in the best angle to prevent oversight – or the device must be fixed in the best possible position to prevent oversight if such a generic position exists in the specific environment to which the device is installed.
- The device environment must be accompanied with conspicuous notices and educational material which informs the customer to shield their PIN during PIN entry.
The device must either be fitted in a swivel stand – so that the customer can position the device in the best angle to prevent oversight – or the device must be fixed in the best possible position to prevent oversight if such a generic position exists in the specific environment to which the device is installed.

The device environment must be accompanied with conspicuous notices and educational material which informs the customer to shield their PIN during PIN entry.

The device must be deployed so that oversight from other customers, either in different payment lanes, or in other areas of the shopping environment, is prevented. This may be achieved through the placement of the lanes and device, so that the customer is automatically positioned between the device keypad and other customers. Alternatively, it may be achieved by the environment in which the device is installed, so that the checkout itself shields the PIN entry process.

The terminal is exclusively made for indoor use.

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**ADVICE**

Positioning of the terminal on check stand must be in such a way to make cardholder PIN (Personal Identification Number) spying infeasible.

Installing device on an adjustable stand must be in such a way that consumers can swivel the terminal sideways and/or tilt it forwards/backwards to a position that makes visual observation of the PIN-entry process difficult.

Positioning of in-store security cameras such that the PIN-entry keypad is not visible.

NEVER ask the customer to divulge their PIN Code. Customers should be advised to ensure that they are not being overlooked when entering their PIN Code.
5_4 Cleaning the terminal

Unplug all the wires from terminal.

Good rules for proper cleaning of the terminal are:

- Use a soft cloth that is very slightly soaked with soapy water to clean the outside of terminal.
- Do not clean the electrical connections.
- Do not use in any case, solvents, detergents or abrasive products: Those materials might damage the plastic or electrical contacts.
- Avoid exposing the terminal to the direct rays of the sun.
- Do not put anything into the slot of the smart card reader.

5_5 Transport and storage

Adopt general transportation mode, and prevent the goods from sunlight, snow, shower and mechanical impact. Transport the devices with care, do not throw it forcibly. Prevent the packaging from extrusion during transportation, to avoid breakage.

The product should be stored in the original packing box. The warehouse is not allowed to have all sorts of harmful gases, inflammable, explosive, corrosive chemical goods, strong mechanical vibration and strong magnetic field. Packing box should be at least 15cm above the ground, and be away from heat, cold, window or air inlet source at least 50cm.
6_Recommendation

6.1 Environment (WEEE, Batteries and Packaging)

This product is labelled in accordance with European Directives 2002/96/EC concerning Waste Electrical and Electronic Equipment (WEEE) and 2006/66/EC concerning Batteries and Accumulators. Those provisions are requiring producers and manufacturers to become liable for take-back, treatment and recycling upon end of life of equipment and batteries.

The associated symbol means that WEEE and waste batteries must not be thrown away but collected separately and recycled.

Ingenico ensures that efficient collection and recycling schemes are set-up for WEEE and batteries according to the local regulation of your country. Please contact your retailers for more detailed information about the compliance solution in place for disposing of your old product and used batteries.

Packaging waste must also be collected separately to assure a proper disposal and recycling.

Please note that proper recycling of the electrical and electronic equipment and waste batteries will ensure safety of human health and environment.
7_Troubleshooting

Q: The terminal cannot be started.
A: The device might be under low energy status or the program may be damaged. Please make sure the power is enough and then restart your device. If it still fails, please contact our customer service department for help.

Q: Printer cannot work.
A: This may be caused by abnormal power supply or incorrect paper installation.

Check the battery status or the terminal power connection. If the remaining battery power is insufficient for a complete printing operation, the printer will not print the paper.

Check the printer roller and if the paper dust cover is correctly installed.

If the problem still exists, please contact our customer service centre.

Q: Transaction Processing Failure
A: Following reasons are likely to cause transaction failure: damaged magnetic card or smart card SAM card, damaged card reader, improper operation of card swiping, damaged or unconnected, unconnected phone line, etc.

- Try to use more than one magnetic card to test the transaction, to confirm the failure is not caused by magnetic card.
- Make sure card swiping is operated correctly.
- Manually process the transaction instead of card reader. If manual transaction works, the failure may be caused by magnetic card reader.
- Use more than one smart card to test the transaction, to confirm the failure is not caused by smart card. Make sure the SAM card is correctly inserted into the card slot.
- Check if the SIM card is installed correctly and local wireless communication network functions or nor.

If there is still problem, please contact our customer service centre.
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